

Title (en)

OPTICAL SIGNAL CONTROL DEVICE AND OPTICAL COMMUNICATION SYSTEM

Title (de)

OPTISCHE SIGNALSTEUERVORRICHTUNG UND OPTISCHES KOMMUNIKATIONSSYSTEM

Title (fr)

DISPOSITIF DE COMMANDE DE SIGNAL OPTIQUE ET SYSTÈME DE COMMUNICATION OPTIQUE

Publication

**EP 3754873 A4 20210310 (EN)**

Application

**EP 18910321 A 20180320**

Priority

JP 2018011073 W 20180320

Abstract (en)

[origin: EP3754873A1] An optical signal control device (70) is configured to include: a leakage amount calculating unit (83) calculating, from a light intensity measured by a first light intensity measuring unit (77) and a light intensity measured by a second light intensity measuring unit (78), a leakage amount of light leaking from other optical signals to each of optical signals included in a combined signal; and an attenuation amount calculating unit (84) calculating, from the light intensity measured by the second light intensity measuring unit (78) and the leakage amount of light, an attenuation amount of each of the optical signals included in the combined signal, and a wavelength selective switch (71) attenuates each of the optical signals included in the combined signal depending on the attenuation amount calculated by the attenuation amount calculating unit (84).

IPC 8 full level

**H04J 14/02** (2006.01); **H04B 10/079** (2013.01); **H04B 10/27** (2013.01)

CPC (source: EP US)

**H04B 10/079** (2013.01 - US); **H04B 10/07955** (2013.01 - EP); **H04J 14/0212** (2013.01 - EP US)

Citation (search report)

- [A] JP 2018026749 A 20180215 - NIPPON TELEGRAPH & TELEPHONE
- [A] US 2010129079 A1 20100527 - BATO KOJI [JP], et al
- [A] MIZUNO T ET AL: "In-service crosstalk monitoring for dense space division multiplexed multi-core fiber transmission systems", 2017 OPTICAL FIBER COMMUNICATIONS CONFERENCE AND EXHIBITION (OFC), OSA, 19 March 2017 (2017-03-19), pages 1 - 3, XP033100833, DOI: 10.1364/OFC.2017.M3J.2
- [A] RADEMACHER GEORG ET AL: "Time-dependent crosstalk from multiple cores in a homogeneous multi-core fiber", 2017 OPTICAL FIBER COMMUNICATIONS CONFERENCE AND EXHIBITION (OFC), OSA, 19 March 2017 (2017-03-19), pages 1 - 3, XP033100929, DOI: 10.1364/OFC.2017.TH1H.3
- See also references of WO 2019180822A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3754873 A1 20201223**; **EP 3754873 A4 20210310**; **EP 3754873 B1 20220511**; CN 111903078 A 20201106; CN 111903078 B 20220607; JP 6741365 B2 20200819; JP WO2019180822 A1 20200528; US 11271644 B2 20220308; US 2021111790 A1 20210415; WO 2019180822 A1 20190926

DOCDB simple family (application)

**EP 18910321 A 20180320**; CN 201880091194 A 20180320; JP 2018011073 W 20180320; JP 2020507171 A 20180320; US 201816970809 A 20180320